

LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A surgical probe, comprising:

a handle and a shaft which is connected to the handle (14);

wherein the shaft comprises:

a proximal electrode;

a distal electrode; and has two axially mutually spaced electrodes, of which an electrode nearer the handle forms a wherein the proximal electrode is nearer to the handle than the distal electrode, and the other electrode which is far from the handle forms a distal electrode, wherein the electrodes respectively form an outside surface of the shaft and are separated from each other by

an insulator; and

a hollow body extending from the handle, the distal end of the hollow body integrally forming the distal electrode, with the hollow body being distally closed, made of metal and electrically conductive;

wherein the hollow body comprises a portion of smaller outside diameter and a portion of larger outside diameter, wherein the portion of larger outside diameter comprises the distal electrode and wherein the portion of smaller outside diameter supports the proximal electrode and the insulator thereon, wherein the insulator electrically insulates the proximal electrode from the distal electrode, with the insulator comprising an insulating layer supported on the hollow body and positioned in a radial direction between the hollow body and the proximal electrode; the hollow body further comprising a fluid passage in the interior thereof, configured for passage of a cooling fluid therein;

wherein the proximal and distal electrodes comprise an outer surface of the shaft and are axially separated from each other by the insulator;
wherein the outside diameter of the two electrodes and the outside diameter of the insulator are approximately equal and wherein the shaft has a fluid passage for a cooling fluid, which extends in the interior of the shaft from the handle into the distal electrode;

characterized in that the shaft has a distally closed hollow body which is connected to the handle and forms the distal electrode, carries the insulator as well as the proximal electrode and an insulating layer which is arranged in the radial direction between the hollow body and the proximal electrode

and further characterized in that wherein the probe possesses is configured to have a mechanical strength, rigidity and perforation capability that permits insertion of the shaft into the body tissue.

2. (Currently Amended) A surgical probe as set forth in claim 1, wherein characterized in that the insulating layer of the insulator is arranged both between the hollow body and the proximal electrode and also at the interface between the hollow body and the insulator.

3. (Currently Amended) A surgical probe as set forth in claim 1, wherein characterized in that the insulating layer is formed by shrink tube.

4. (Currently Amended) A surgical probe as set forth in claim 1, wherein characterized in that the proximal electrode is formed by a metal tube of a diameter which is substantially equal over its length and of substantially equal wall thickness.

5. (Cancelled)

6. (Currently Amended) A surgical probe as set forth in claim 5 1, wherein characterized in that the fluid passage extends in the hollow body to the closed end thereof and is of a diameter which is substantially equal throughout.

7. (Currently Amended) A surgical probe as set forth in claim 1, wherein characterized in that the hollow body is shaped to a point at its distal end.

8. (Currently Amended) A surgical probe as set forth in claim 1, wherein characterized in that in the region of the distal electrode the hollow body is of an outside diameter which is approximately equal to the outside diameter of the proximal electrode or of the insulator.
9. (Currently Amended) A surgical probe as set forth in claim 1, wherein characterized in that the hollow body is of a smaller outer diameter in the region of the insulator and the distal electrode than in the region of the proximal electrode.
10. (Currently Amended) A surgical probe as set forth in claim 1, characterized by wherein a hose is in the interior of the fluid passage, with a mouth of the hose opening in the proximity of the closed distal end of the fluid passage, which hose is so arranged and connected that a cooling fluid is to be passed through the hose into the proximity of the distal end of the fluid passage, there issues from the mouth opening of the hose and can flow back between the hose and the wall of the fluid passage to the proximal end of the shaft.
11. (Currently Amended) A surgical probe as set forth in claim 1, wherein characterized in that at its proximal end the shaft is connected to the handle and is there partially embedded in sealing material in such a way that the tube forming the proximal electrode is completely embedded at its proximal end in the sealing material while the proximal end of the hollow body projects from the sealing material.
12. (Currently Amended) A surgical probe as set forth in claim 11, wherein characterized in that the proximal electrode is electrically contacted within the sealing material.